Construction, Rehabilitation, Operation and Maintenance, Western Area Power Administration

Proposed Appropriation Language

For carrying out the functions authorized by title III, section 302(a)(1)(E) of the Act of August 4, 1977 (42 U.S.C. 7152), and other related activities including conservation and renewable resources programs as authorized, including official reception and representation expenses in an amount not to exceed $1,500, [$193,357,000] *$164,916,000*, to remain available until expended, of which [$182,172,000] *$154,616,000* shall be derived from the Department of the Interior Reclamation Fund: *Provided*, That of the amount herein appropriated, $5,036,000 is for deposit into the Utah Reclamation Mitigation and Conservation Account pursuant to title IV of the Reclamation Projects Authorization and Adjustment Act of 1992: *Provided further, That amounts collected by the Western Area Power Administration pursuant to the Flood Control Act of 1944 and the Reclamation Project Act of 1939 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures as follows: for fiscal year 2001, up to $35,500,000; for fiscal year 2002, up to $35,500,000; for fiscal year 2003, up to $30,000,000; and for fiscal year 2004, up to $20,000,000.*

Explanation of Change

New appropriation language adds new authority to use revenues to fund purchase power and wheeling activities in FY 2001 through FY 2004.

Falcon and Amistad Operating and Maintenance Fund

Proposed Appropriation Language

For operation, maintenance, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams, [$1,309,000] *$2,670,000,* to remain available until expended, and to be derived from the Falcon and Amistad Operating and Maintenance Fund of the Western Area Power Administration, as provided in section 423 of the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995.

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Western Area Power Administration

Program Mission

The mission of the Western Area Power Administration (Western) is to market and deliver reliable, cost-based hydroelectric power and related services. Western provides electric power to more than 600 customers over a 1.3-million-square-mile area in the central and western United States. Western repays the Federal investment for which it is responsible within the time frames established by law and regulations.

Western's Goal

- Western will be a premier power marketing and transmission organization.

Program Objectives

- Western uses sound business practices to create and deliver high-value products and services to our customers.
- Western recruits, develops and retains a safety-focused, highly productive, customer-oriented and diverse work force.
- Western promotes competition and reliability in the evolving electric utility industry.

Performance Measures

Western's performance measures support the Department of Energy's Strategic Plan and Comprehensive National Energy Strategy. These measures are aimed at achieving specific outcomes including establishment of rates sufficient to make full and timely repayment to the U.S. Treasury; maintenance of the health and safety of all employees; and development and achievement of the operation of a reliable, low-cost, environmentally-sound power system which facilitates competitive, efficient and reliable power deliveries. Outputs include:

- *Transmission System Performance*: Ensure that each power system control area operated by Western receives, for each month of the fiscal year, a Control Performance Standard (CPS) Rating of "Pass" using the North American Electric Reliability Council (NERC) performance standard. Control criteria compliance are measures used to determine if utility employees, control equipment, and generation are responsive to the minute-by-minute load changes throughout the year. Good control performance is required to maintain system reliability and to reduce losses, as well as maintain equity among interconnected systems. Western's annual average compliance ratings in FY 1999 were 199.3

for CPS1 and 98.1 for CPS2, well exceeding the NERC minimum of 100 and 90, respectively. Industry averages were 174.18 and 94.22, respectively.

- *Safety*: Achieve a safety performance of at most a 3.3 frequency rate for recordable injuries per 200,000 hours worked, or the Bureau of Labor Statistics industry rate, whichever is lower. Total recordable case (accident) rate measures the recordable accident frequency rate by multiplying the number of recordable injuries by 200,000, then dividing by the total hours worked. Western's calendar year 1999 rate of 2.4 is well below the latest published (1998) industry case rate of 5.1.
- *Cost Growth*: The change in actual regular operation and maintenance obligations from one year to the next is no greater than the annual rate of inflation for the same period. In FY 1999, regular operation and maintenance obligations were 0.3 percent less than FY 1998. The annual rate of inflation for that same period was 2.6 percent.
- *Repayment of Power Investment*: Meet planned repayment of principal on power investment. Although Western's power generation and transmission activities provided $136 million (up from $108.9 million in FY 1997) for repayment of unpaid investment during FY 1998, actual principal payments were lower than planned principal repayment by $18.5 million causing the ratio to decrease to -11.97 percent. The actual principal payments were less than planned primarily because net interest expenses for the Colorado River Storage Project exceeded planned amounts. Final FY 1999 data is not yet available.

Significant Accomplishments and Program Shifts

- In FY 2001, the Department is seeking new authority to fund purchase power and wheeling (PPW) program requirements. The new language provides authority to utilize revenues collected from power and wheeling sales to finance annual PPW activities previously funded by direct appropriations. Other PMA alternative financing mechanisms will continue. "Use of revenue" authority is expected to be phased out in annual decrements by the end of FY 2004. Western will encourage its customers to assume additional responsibility for the purchase and delivery of power to customer load centers.
- In the long term, Western anticipates financing through these alternative methods an increasing proportion of the PPW program. In the short term, however, several constraints, including contractual constraints, impede our and our customers' ability to negotiate these changes with suppliers. The most significant constraint is the lack of participation in bill crediting methods by a key long-term contract supplier of energy and transmission services to the Central Valley Project (CVP). The lack of participation impedes the ability of our customers to fund Western's PPW expenditures directly with this supplier.
- The Administration's policy to focus PMA funding for fiber optic communications on those investments needed to meet each PMA's projected operational needs. The Administration will more fully describe its policies regarding the appropriate scope of PMA investments in fiber optics when it submits to Congress the fiber optics plans for each PMA required by Congress in the conference report accompanying the FY 2000 Energy and Water Appropriations Act.

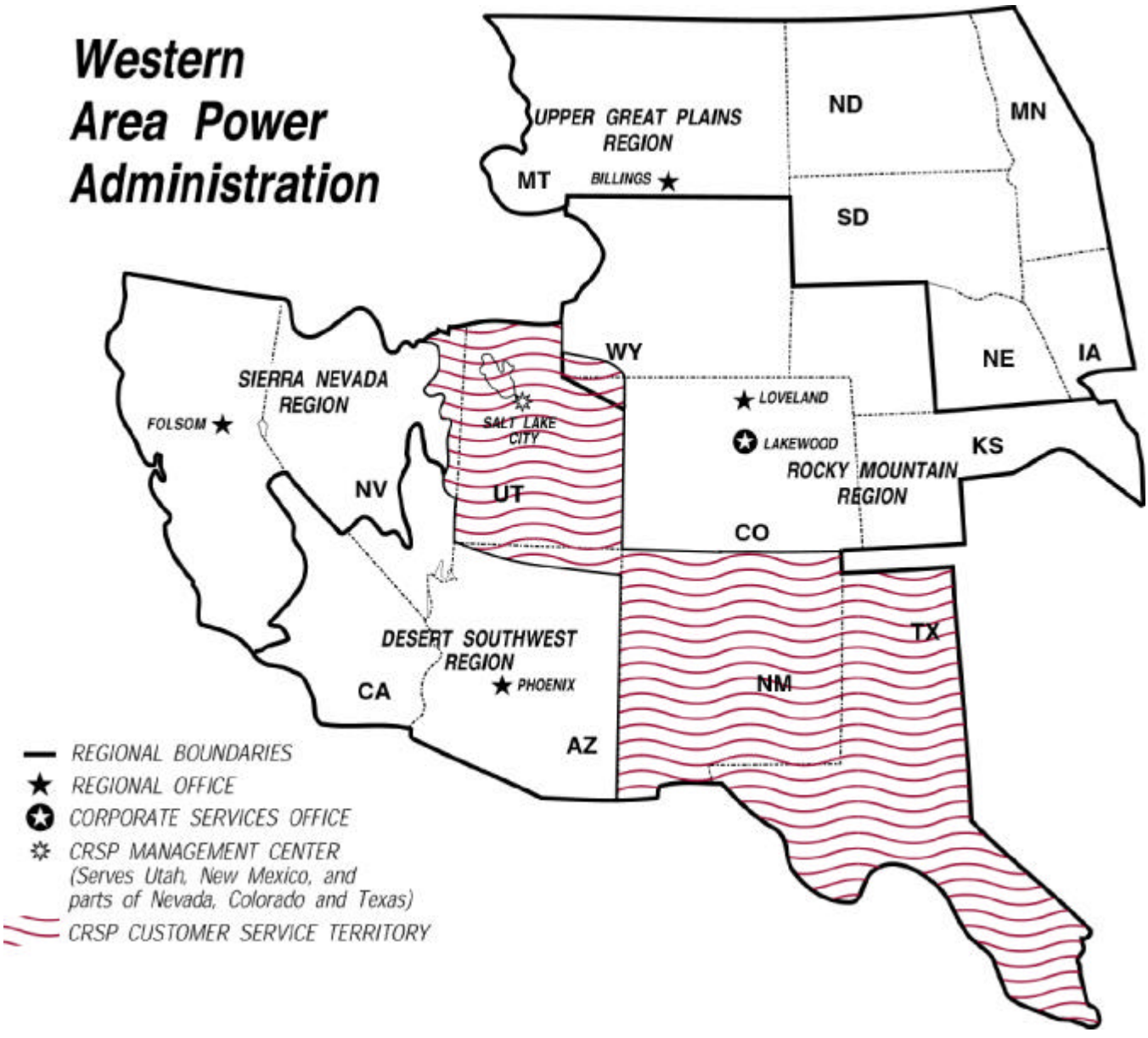
- Beginning in FY 2000, Western is financing the Boulder Canyon Project operations directly from the Colorado River Dam Fund (CRDF). Previously, this Project was included in Western's Construction, Rehabilitation, Operation and Maintenance account, and funds were provided from the CRDF by transfer.
- In FY 1999, Western
  - Sold 45.1 billion kilowatt-hours of energy; and
  - Collected gross operating revenues of $886.7 million.
- On February 1, 1999, Western implemented new Standards of Conduct to comply with the Federal Energy Regulatory Commission's (FERC) Order No. 889. The Order requires separation of transmission functions from power marketing functions and restricts communications between power marketing and transmission operations employees.
- Western's Sierra Nevada Region has joined the California Power Exchange to purchase and sell power more competitively. They have also worked extensively with the California Independent System Operator (ISO) to coordinate transmission and have taken on the role of transmission scheduler.
- Western's Desert Southwest Region has played an integral role in the development of Desert STAR, a newly evolving ISO in the Southwest. The Region has also completed an inter-control area agreement with the California ISO to better coordinate transmission transactions across the two control areas.
- Throughout 1999, Western continued to prepare for the Y2K rollover. We completed extensive inventories, remediated or replaced non-Y2K compliant equipment and systems and conducted extensive testing to verify Y2K readiness. We developed and drilled detailed contingency plans designed to keep power flowing even if problems developed over the rollover. No problems were experienced.
- Western operated and maintained 16,854 circuit-miles of high-voltage transmission lines, 256 substations, and associated power system control, communication and electrical facilities located across 15 western states; marketed low-cost, reliable hydroelectric power to 643 power customers, and provided system operations and load dispatching, power billing and collection, power marketing, power resource planning, energy services, technology transfer, security and emergency management for 15 separate power projects. Western, once again, exceeded both the NERC and industry averages for transmission system performance. In addition, NERC placed Western on its Generating Availability Data System's Honor Roll for timely and accurate reporting of availability data for 39 U.S. Army Corps of Engineers and Bureau of Reclamation hydro generating units in Western's Upper Great Plains Region.
- Western continued to maintain power system reliability and integrity by replacing aging substation equipment and degraded transmission facilities through well-planned maintenance and construction programs. Replacement of outdated analog communications equipment with digital and fiber-optics

continued, in concert with radio replacements to meet Federal Communications Commission-mandated compliance with narrow-band requirements.

- On June 18, 1999, Western, along with 22 other Western Systems Coordinating Council (WSCC) members, signed WSCC's Reliability Management System (RMS) agreement. RMS is the first contract-based approach to ensure the reliability of the interconnected transmission system.
- Western continues as the Federal representative on the NERC compliance subcommittee. The subcommittee has begun NERC's effort to develop a mandatory system to ensure compliance with the reliability standards and criteria.
- Western is also the Federal representative on the newly-formed security committee of the North American Electric Reliability Organization. This committee sets the operating standards and policies for the North American high-voltage power grid.
- Additionally, a Western power operations specialist has been elected Vice-Chairman of the WSCC Operations Committee for 2000 and 2001. The WSCC is the largest of 10 regional reliability councils of NERC.
- Western completed and published its post-2004 marketing plans for the Salt Lake City Area Integrated Projects (SLCA/IP) and the Central Valley and Washoe Projects. By finalizing the plans, we were able to sign 20-year contract extensions with nearly 200 existing customers. Under the new plans, current customers can receive more than 90 percent of the resource being marketed after 2004. The rest of the resource will be available to new customers, including Native American tribes.
- Western negotiated and signed contracts with 25 Native American tribes in the Upper Midwest as part of the Pick-Sloan Missouri Basin Program's Post-2000 marketing program. This complex and innovative effort involved current and new customers in partnerships to bring the benefits of the Federal power program to these tribes.
- On June 25, 1999, after an exhaustive public process and consideration of public comment, Western published information in the Federal Register regarding how it will market power in the future.
- Construction continued on the new building for Western's corporate services office. The space, obtained through a General Services Administration contract, will result in reduced annual lease costs. Full occupancy occurred in FY 2000.
- Western implemented an integrated financial support system, maintenance information system, and time and attendance system. Work will continue in FY 2000 to stabilize the system.
- Western was recognized nationally for its effort in installing solar photovoltaic (PV) systems as part of the Million Solar Roofs Program. Western made a commitment to purchase PV systems for four of its five regional offices. Western also conducted four PV installation workshops at those offices' PV sites.
- In addition to loaning technical equipment and providing assistance to customers under our Integrated Resource Planning (IRP) program, Western launched a comprehensive public process to review and revise IRP criteria. Changes in the power industry and requirements in the Energy Policy Act of 1992

led to the criteria reassessment. Western gathered input from customers and stakeholders on ways to streamline the IRP process and make it more flexible. We expect to publish a final rule for IRP criteria in the Federal Register in Spring 2000.

- On June 9, 1999, Western received the Department of Energy's FY 1998 Small Business Award for meeting or exceeding its goals in awarding contracts for products and services to small businesses, small business set-asides, small disadvantaged business and women-owned businesses.


Western
Area Power
Administration
UPPER GREAT PLAINS
REGION
MT
BILLINGS
ND
MN
SD
NE
IA
WY
SIERRA NEVADA
REGION
FOLSOM
SALT LAKE
CITY
LOVELAND
LAKEWOOD
KS
ROCKY MOUNTAIN
REGION
NV
UT
CO
DESERT SOUTHWEST
REGION
PHOENIX
CA
AZ
NM
TX
REGIONAL BOUNDARIES
REGIONAL OFFICE
CORPORATE SERVICES OFFICE
CRSP MANAGEMENT CENTER
(Serves Utah, New Mexico, and
parts of Nevada, Colorado and Texas)
CRSP CUSTOMER SERVICE TERRITORY

Construction, Rehabilitation, Operation and Maintenance

Funding Profile

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Original Appropriation	FY 2000 Adjustments	FY 2000 Current Appropriation	FY 2001 Request
Construction, Rehabilitation, Operation and Maintenance Account					
Program Direction	106,990	104,537	0	104,537	106,644
Operation and Maintenance	36,469	35,096	-355 [a]	34,741	36,104
Construction and Rehabilitation	20,802	26,802	-400 [a]	26,402	23,115
Purchase Power and Wheeling	53,886	41,886	0	41,886	35,500
Utah Mitigation and Conservation	5,036	5,036	0	5,036	5,036
Total Program, Operating Expenses	223,183	213,357	-755 [a]	212,602	206,399
Planned Use of Prior Year Balances	-20,576	-20,000	0	-20,000	-5,983
Offsetting Collections Realized	0	0	0	0	-35,500
Total Budget Authority Request	202,607	193,357	-755 [a]	192,602	164,916

Public Law Authorizations:
Public Law 57-161, "The Reclamation Act of 1902"
Public Law 95-91, "Department of Energy Organization Act" (1977)
Public Law 102-486, "Energy Policy Act of 1992"
Public Law 66-389, "Sundry Civil Appropriations Act" (1922)
Public Law 76-260, "Reclamation Project Act of 1939"
Public Law 80-790, "Emergency Fund Act of 1948"
Public Law 102-575, "Reclamation Projects Authorization and Adjustment Act of 1992"
"Economy Act" of 1932, as amended
"Interior Department Appropriation Act of 1928" (44 stat. 957)

Funding by Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Western Area Power Administration	223,183	212,602	206,399	-6,203	-2.9%
Planned Use of Prior Year Balances	-20,576	-20,000	-5,983	+14,017	-70.1%
Offsetting Collections Realized	0	0	-35,500	-35,500	N/A
Total, Construction, Rehabilitation, Operation and Maintenance Account	202,607	192,602	164,916	-27,686	-14.4%

[a]Rescission required by the FY 2000 Consolidated Appropriations Act distributed to Western Area Power Administration.

Site Description

Western Area Power Administration's (Western) service area covers 1.3-million square miles in 15 states. We sell power to 643 wholesale customers including 284 municipalities, 58 cooperatives, 17 public utility and 47 irrigation districts, 50 Federal and 55 State facilities, 24 investor-owned utilities, 30 marketers, and 78 Reclamation customers. They, in turn, provide retail electric service to millions of consumers in these central and western states: Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah and Wyoming.

Western annually markets and transmits more than 10,000 megawatts of power from 55 hydropower plants. We sell about 40 percent of regional hydroelectric generation. Western also markets the United States' entitlement from the coal-fired Navajo Generating Station near Page, Arizona.

Western operates and maintains an extensive and complex high-voltage transmission system to deliver power to our customers. Using this 16,854-circuit-mile Federal transmission system, Western markets and delivers reliable electric power to most of the western half of the United States. Western's transmission system is the third largest in the United States.

The power facilities are made up of 14 multipurpose water resource projects and one transmission project. The systems include Western's transmission facilities and power generation facilities owned and operated by the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers and the U.S. Section of the International Boundary and Water Commission.

Power sales, transmission operations and engineering services for our system are accomplished by our employees at 51 duty stations located throughout our service area. These include our Corporate Services Office in Lakewood, Colorado, and four customer service regional offices in Billings, Montana; Loveland, Colorado; Phoenix, Arizona; and Folsom, California. The Colorado River Storage Project is also supported by a Project Management Center in Salt Lake City, Utah.

Construction, Rehabilitation, Operation and Maintenance Program Direction

Mission Supporting Goals and Objectives

Western Area Power Administration's (Western) Program Direction activity provides compensation and all related expenses for the workforce that operates and maintains Western's high-voltage interconnected transmission system and associated facilities and those that plan, design, and supervise the construction of replacements, upgrades and additions (capital investments) to the transmission facilities.

Western operates and maintains the transmission system to ensure an adequate supply of reliable electric power in a clean and environmentally-safe, cost-effective manner throughout its 15-state service territory. Western achieves continuity of service by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the benefits gained from non-firm energy sales. Additionally, Western operates the Western Systems Coordinating Council's Rocky Mountain/Desert Southwest Security Coordination Office.

Western markets power generated at 55 hydropower plants which are operated primarily by the Bureau of Reclamation, the Corps of Engineers, and the U.S. Section of the International Boundary and Water Commission. Western also markets the United States' entitlement from the Navajo coal-fired powerplant near Page, Arizona.

In concert with our customers, Western reviews required replacements and upgrades to its existing infrastructure to sustain reliable power delivery to our customers and to contain annual maintenance expenses. The timing and scope of these replacements and upgrades are critical to assure that Western's facilities do not become the "weak link" in the interconnected system. Western pursues opportunities to join with neighboring utilities to jointly finance activities, which result in realized cost savings and/or increased efficiencies for all participants.

Performance Measures

The Program Direction activities support the performance measures presented under Program Mission.

- Highly-skilled staff respond to minute-by-minute load changes to meet or exceed North American Electric Reliability Council and industry averages for Transmission System Performance. Craftsmen maintain or replace equipment to assure its capability for reliable delivery of power. The crews also rapidly restore the system following any disturbance.
- Program Direction activities support Western's Safety measurement by making safety a priority in each and every task because of the extreme hazards associated with a high-voltage electrical system. Safety is not a separate program but is integrated into all procedures and jobs.

- The Cost Growth measurement is a direct reflection of Western's commitment to optimize economical operation and maintenance of the interconnected high-voltage power system, including the associated Program Direction activities, while not compromising the reliability of power deliveries. Controlling costs is vital to the continuing health of our organization as we move into an era of increased competition. High costs contribute to higher rates, reducing our competitive position and that of our customers.
- Program Direction activities support the Repayment of Power Investment measurement by providing 24-hour/day reliable electric power delivery to our customers and maximizing revenues from non-firm power sales.

Funding Schedule

(dollars in thousands, whole FTEs)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Salary & Benefits	75,629	72,006	74,886	+2,880	+4.0%
Travel	7,600	7,634	7,634	0	0.0%
Support Services	8,291	9,827	10,045	+218	+2.2%
Other Related Expenses	15,470	15,070	14,079	-991	-6.6%
Total, Program Direction	106,990	104,537	106,644	+2,107	+2.0%
Use of Prior Year Balances	-15,745	0	-1,983	-1,983	N/A
Total, Program Direction Budget Authority	91,245	104,537	104,661	+124	+0.0%
Full-Time Equivalents (FTE)	1,169	1,075	1,075	+0	0.0%

Detailed Program Justification

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Salary and Benefits			
Salaries and benefits are provided for 1,075 Federal employees to operate and maintain, on a continuing basis, Western's high-voltage interconnected transmission system, comprised of 16,854 circuit-miles of line, 260 substations, and associated power system control, communication and general plant facilities. Dispatchers provide 24-hour-a-day operation of four dispatching centers and one security coordination office. Staff provide continuing services such as system operations, power billing and collection, power marketing, power scheduling, energy services, technology transfer, environmental, safety, security and emergency management activities. Staff inspect construction activities in progress (identified in the Construction and Rehabilitation activity) to ensure quality results and safe working methods. General power resources planning and preconstruction activities, including planning, environmental clearance, collection of field data, design of facilities, and issuance of specifications for future rehabilitation and upgrades of existing transmission lines continue. Staff evaluate general power resources, collaborating and planning with customers and other members of the interconnected transmission system to identify the most effective transmission system improvements to maximize benefits to all participants. A 4-percent inflation factor has been applied	75,629	72,006	74,886
Travel			
Transportation and per diem allowance for day-to-day performance of duties of Federal staff, including crews who maintain the transmission system necessary to market power in a 15-state area, and transportation of things are provided. The remote and rural locations that Western serves leads to less competitive pricing. Estimates are based on historical travel costs and planned activity.	7,600	7,634	7,634

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Support Services			
Support services funded in this activity include automated data processing, warehousing, computer-aided drafting, engineering, and general administrative support. The increase is primarily attributed to the additional requirement for software maintenance/support for systems in the Desert Southwest and Rocky Mountain Regions to support mandatory industrywide interchange schedule tagging and power system accounting activities	8,291	9,827	10,045
Other Related Expenses			
Other related expenses including, but not limited to, rental space, utilities, supplies and materials, telecommunications, personal computers, printing and reproduction, training tuition, distribution of multi-project facilities costs, Department of Energy's (DOE) working capital fund assessment, and distribution of National Archive and Records Administration costs continue. Rental space costs assume the GSA-inflation factor, adjusted by the number of employees funded in this account. DOE's working capital fund portion in this account increased 29.5 percent and is primarily attributed to costs associated with payroll/personnel systems including preparation of withholding tax statements. Other costs are based on historical usage and actual costs of similar items	15,470	15,070	14,079
Total, Program Direction	106,990	104,537	106,644

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Salary and Benefits	
■ Increase in salaries and benefits is due to application of a 4-percent pay raise assumption	+2,880

	FY 2001 vs FY 2000 ($000)
Support Services	
■ Increase in support services is primarily for an additional contract requirement for software support in Western's Desert Southwest and Rocky Mountain Regions supporting industry restructuring interchange schedule tagging and power system accounting activities, offset by reduced costs for general administrative services.	+218
Other Related Expenses	
■ Decrease in other related expenses is attributed to a decrease in software and personal computer upgrade purchases and a decrease in rental space costs.	-991
Total Funding Change, Program Direction	+2,107

Support Services

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Technical Support Services					
Economic and Environmental Analysis . .	0	0	0	0	N/A
Test and Evaluation Studies	0	0	0	0	N/A
Total, Technical Support Services	0	0	0	0	N/A
Management Support Services					
Management Studies	352	165	153	-12	-7.3%
Training and Education	81	85	85	0	0.0%
ADP Support	2,760	4,314	4,728	+414	+9.6%
Administrative Support Services	5,098	5,263	5,079	-184	-3.5%
Total, Management Support Services	8,291	9,827	10,045	+218	+2.2%
Total, Support Services	8,291	9,827	10,045	+218	+2.2%

Other Related Expenses

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Training	1,065	1,024	1,000	-24	-2.3%
Working Capital Fund	277	349	452	+103	+29.5%
Printing and Reproduction	315	325	300	-25	-7.7%
Rental Space	3,102	2,891	2,726	-165	-5.7%
Software Procurement/Maintenance Activities/Capital Acquisitions	4,073	4,835	3,986	-849	-17.6%
Other	6,638	5,646	5,615	-31	-0.5%
Total, Other Related Expenses	15,470	15,070	14,079	-991	-6.6%

Operation and Maintenance

Mission Supporting Goals and Objectives

Western Area Power Administration's (Western) operation and maintenance (O&M) activity supports the Department of Energy's Strategic Plan to promote secure, competitive, and environmentally responsible energy systems that serve the needs of the public. Western ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its 15-state service territory by maintaining its power system at or above industry maintenance standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from non-firm energy sales.

Supplies and materials, such as wood poles, instrument transformers, meters and relays must be procured to provide necessary resources to respond to routine and emergency situations in Western's high-voltage interconnected transmission system. Technical services, such as waste management disposal, environmental impact analyses, and pest and weed control are utilized as needed.

Western's planned replacement and addition activity is based on an assessment of age and the maintenance/frequency of problems of individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western's power customers, who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e., electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relays and oscillographs must be acquired to assure reliable service to Western's customers. System component age, environmental concerns, and risk to system reliability necessitate orderly replacement before significant problems develop.

Replacement, upgrade and installation of microwave, fiber optics, supervisory control and data acquisition, and other communication and control equipment continues to provide increased system reliability and operation, and to reduce maintenance and equipment costs.

Capitalized movable equipment, such as special purpose vehicles (e.g., cranes, auger trucks, manlifts), special purpose equipment (e.g., pole trailers, industrial tractors, brush chippers), specialized test equipment (e.g., motion analyzers and ductor tester equipment), computer-aided engineering equipment, office equipment, and ADP equipment and software, must be upgraded and replaced.

The personnel expenses and personnel performance accomplishments associated with the O&M activity are combined with those of the Construction and Rehabilitation activity and are reflected in the Program Direction section of Western's budget request.

Performance Measures

The O&M program supports the performance measures presented under Program Mission.

- Well-maintained equipment, the resource availability to rapidly restore service following any system disturbance, and the ability of staff to respond to minute-by-minute changes in load requirements are all directly tied to the Transmission System Performance measure. Timely replacement of old or failing electrical equipment prevents sudden failure, unplanned outages, and possible regional power system disruptions.
- The O&M program supports the Safety measurement by placing safety first in all of its day-to-day operations, removing environmental hazards, and replacing equipment that may create a safety hazard for the public and Western's personnel. Each maintenance activity begins with a discussion of safe working procedures. The O&M program also indirectly supports public safety by minimizing or preventing electrical outages and the attendant safety risks and concerns.
- The Cost Growth measurement is a direct reflection of Western's commitment to optimize economic operation and maintenance of the interconnected high-voltage power system while not compromising the reliability of power deliveries.
- The O&M program supports the Repayment of Power Investment measurement by providing 24-hour/day reliable electric power delivery to our customers, thus securing revenues for repayment.

Funding Schedule

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Regular Operation and Maintenance	21,631	19,844	19,890	+46	+0.2%
Replacements and Additions	14,838	14,897	16,214	+1,317	+8.8%
Total, Operation and Maintenance	36,469	34,741	36,104	+1,363	+3.9%
Planned Use of Prior Year Balances	-2,816	0	-2,000	-2,000	N/A
Total, O&M Budget Authority	33,653	34,741	34,104	-637	-1.8%

Detailed Program Justification

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Regular Operation and Maintenance			
■ Supplies and materials necessary to respond to routine and emergency situations in Western's high-voltage interconnected transmission system will be purchased. The request is based on projected work plans for activities funded from this account. Estimates are based on historical data of actual supplies needed to maintain the transmission system reliably, including emergency situations such as ice storms and tornadoes. Costs are based on recent procurement of similar items. The increase is attributed to inflation.	21,631	19,844	19,890
Replacements and Additions			
■ Electrical equipment, such as circuit breakers, transformers, relays and switches, will be replaced. Treatment and/or replacement of wood poles will extend the life of aging, deteriorating transmission lines. Costs are based on analysis of system operation/maintenance requirements and concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques. The decrease is because fewer miles of wood pole transmission line are being treated or replaced in FY 2001 as compared to FY 2000.	5,672	7,456	7,198

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
■ Replacement/upgrade of microwave, supervisory control and data acquisition, and other communication and control equipment, including staged replacement to meet new Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) regulations requiring Western to move to narrow communications band spectrums by 2005 will continue. Costs are based on analysis of system operation/maintenance requirements, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques. The increase reflects accelerated purchases of equipment associated with the movement to narrow communications band spectrums in order to provide delivery and installation time to meet targeted movement dates, and a software upgrade for the supervisory control and data acquisition system in Western's Desert Southwest Region to accommodate industry changes, such as operational data exchange needs and performance reporting.	3,593	1,998	3,600
■ Capitalized movable equipment, such as cranes, manlifts, chippers, snowcats and pole trailers, needed to support the O&M of the interconnected power system will be purchased. Replacement needs are based on age, reliability, and safety of equipment, customer-coordinated review, cost analysis of rebuild versus replacement, availability of replacement parts, and obsolescence of diagnostic maintenance tools. Costs are determined using actual costs of similar items.	5,573	5,443	5,416
Total, Replacements and Additions	14,838	14,897	16,214
Total, Operation and Maintenance	36,469	34,741	36,104

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Regular Operation and Maintenance	
■ Increase in regular O&M is primarily attributed to inflation	+46

	FY 2001 vs FY 2000 ($000)
Replacements and Additions	
■ Increase in replacements and additions is primarily attributed to a software upgrade for one supervisory control and data acquisition system ($424,000), and a more aggressive level of equipment purchases associated with the FCC/NTIA-directed move to narrow communications bands ($1,533,000). The increase is offset by reductions in costs associated with treatment of wood pole transmission lines (-$613,000) and capitalized movable equipment (-$27,000)	+1,317
Total Funding Change, Operation and Maintenance	+1,363

Construction and Rehabilitation

Mission Supporting Goals and Objectives

Western Area Power Administration's (Western) construction and rehabilitation (C&R) activity emphasizes replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers, to contain annual maintenance expenses, and to retain the value of our assets. In FY 2001, Western's transmission system will have 16,854 circuit-miles of line and 260 substations. In FY 2001, 1,281 of the 7,925 miles of wood pole line, or 16 percent, will be over 50 years old, and 3,683 miles, or 46 percent, will be between 41 and 50 years old. Western is continually testing, treating, and replacing individual wood poles and hardware to delay the need for replacing an entire transmission line. As substation equipment (such as power transformers, circuit breakers, and control equipment) reaches the end of its useful life, maintenance costs increase, replacement parts become unavailable, risk of outages increases, and system reliability declines. Western will have 188 transformers and 119 breakers over 41 years old in FY 2001. The replacement of this equipment is systematically planned over a 10-year period. All replacement plans are coordinated with our customers to help establish the timing and scope of replacement at specific substations. When upgrades or additional capacity are required, Western actively pursues opportunities to join with neighboring utilities to jointly finance activities, which result in realized cost savings and increased efficiencies for all participants.

In order for Western's power rates to remain competitive and assure project repayment, Western has aggressively reduced its capital investment program. From levels around $110 million in FY 1992 through FY 1994, Western has reduced its total C&R program to a base of about $40 million since FY 1996 (total program includes equipment, contracts, related expenses, program direction and planned use of prior year balances). Our FY 2001 C&R request level is $3.3 million less than FY 2000. Western continues to refine a long-term C&R program level that will maintain the reliability of, and the Government's investment in, Western's power facilities while minimizing effects on power rates. Our challenge has been to evaluate Western's facilities which were built 40 to 50 years ago, and develop a systematic replacement/upgrade program at a level that retains the value of our assets and assures a safe and reliable transmission system, with minimal rate impacts.

Because of the increase in rehabilitation projects, decrease in new construction projects, and reduced C&R program budget, it is increasingly difficult to plan specific projects years in advance. A piece of equipment scheduled for replacement may test out fine two years later at the beginning of the execution year, resulting in deferring replacement in favor of equipment at higher risk of failure. Discovery of a failing piece of equipment may completely change the planned priority of work. Customer needs may also change, causing Western to revise or reprioritize planned construction projects. Customers and other utilities are also requesting interconnections to Western's transmission system under authority of FERC Orders Nos. 888 and 889; in many cases this work is being accomplished by Western at the applicant's expense. These projects often surface suddenly and move quickly, and can significantly impact Western's C&R program planning and project priorities. While this section incorporates Western's best efforts to identify and schedule necessary C&R projects, the increased focus on replacements and the realities of operating and maintaining a complex interconnected power system mean unforeseen priority projects will

surface from time to time. Western may have to slip or restructure planned projects to accommodate these sudden priority projects, but our projects will continue to be replacements and upgrades of aging existing equipment necessary to maintain the reliability and integrity of Western's power transmission system. Western's policy will continue to assign the highest program priority to those situations which pose the highest risk to safety and system reliability, while meeting the mandates for open access to the transmission system.

Western's C&R program delays replacement costs for as long as reasonably possible while managing the risk of sudden failure and emergency replacement. Further postponement due to budget constraints will contribute to an overall degradation of Western's power facilities, leading to serious power system disruptions and lengthy power outages while crews repair or replace failed equipment under emergency conditions. "Breakdown maintenance" results in higher costs than scheduled replacements and increases safety risks to maintenance crews, as equipment failures are very often tied to extreme weather conditions and/or high system power loadings.

Personnel costs and related expenses for the workforce to plan, collect field data, write specifications, design facilities, award construction contracts, and purchase government-furnished equipment for the C&R activity are combined with those of the Operation and Maintenance activity and are reflected in the Program Direction section of Western's budget request.

Performance Measures

The C&R program supports the performance measures as presented under Program Mission.

- Replacement and upgrade of aged power system components are crucial to system reliability, and communications improvements maintain vital control over system operation. Both contribute to the Transmission System Performance measure by reducing the risk of equipment failure, unplanned outages, and possible regional power system disruptions.
- The C&R program also supports the Safety goal by reducing the hazards associated with worn or aging equipment, correcting outmoded design deficiencies, and by replacing deteriorated wood poles which present a serious climbing hazard to linemen. Public safety is supported by avoiding or minimizing the negative impacts of unplanned outages caused by equipment failure.
- The activities under the C&R program indirectly support the Cost Growth and Repayment of Power Investment measures by promoting a well-planned construction and replacement program with a relatively stable budget, and by avoiding emergency "breakdown maintenance" costs and preventing outages which could impact power deliveries and revenues.

Funding Schedule

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Transmission Lines and Terminal Facilities	3,807	15,024	4,017	-11,007	-73.3%
Substations	7,130	5,454	12,910	+7,456	+136.7%
Other [a]	9,865	5,924	6,188	+264	+4.5%
Total, Construction & Rehabilitation	20,802	26,402	23,115	-3,287	-12.4%
Planned Use of Prior Year Balances	-1,845	-5,000	-2,000	+3,000	+60.0%
Total, C&R Budget Authority	18,957	21,402	21,115	-287	-1.3%

Detailed Program Justification

(dollars in thousands)

FY 1999	FY 2000	FY 2001

Transmission Lines and Terminal Facilities

- Complete minor modifications and rehabilitation of transmission lines (TL) in FY 2001 to ensure power system reliability and stability:
  - Replace jointly-owned 500-kV series capacitors at Round Mountain Substation (California). Joint venture with Pacific Gas & Electric, who will perform the work;
  - Removal of 16.1-mile Blue River-Summit TL (Colorado) from a floodplain and scenic area;
  - Reroute a 5-mile portion of Curecanti-Lost Canyon 230-kV TL (Colorado) located on active landslides which have moved and damaged existing structures;
  - Rebuild Prospect Valley Tap-Prospect Valley Substation 115-kV TL (Colorado). This 7.3-mile line was constructed in 1944 and has badly deteriorated poles;
  - Replace pneumatic control and bypass systems for series capacitor banks at Mead Substation (Nevada) and Liberty Substation (Arizona). The existing controls have deteriorated and are no longer working well, and spare parts are no longer available. Failure of the controls reduces capacity on the key Mead-Liberty 345-kV TL by 150 megawatts;

[a] Other includes communication equipment (such as microwave, telecommunications, and supervisory control and data acquisition systems), maintenance facilities, power facility developmental costs, and minor unscheduled jobs.

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
▸ Wood pole life extension of Armour-Mt. Vernon 115-kV TL (South Dakota); ▸ Construct Shiprock-Four Corners (New Mexico) approach spans to convert operation of the TL to 345-kV. Joint venture with Tri-State Generation & Transmission Association and Arizona Public Service Company. This project has been on hold until recently, pending land agreements with Native Americans; ▸ Uprate the Big George-Carter Mountain TL (Wyoming) from 69-kV to 115-kV operation to reduce loading on other lines and improve system operation. Project involves substation and tap equipment changes only; ▸ Rebuild four short aging tap lines in Wyoming and add overhead ground wire to improve reliability; ▸ Treat or replace wood poles that have failed inspection in the Colorado River Storage Project and Pick-Sloan Missouri Basin Program as a means of TL life extension. Funding level is determined by estimating the cost to complete each project, and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience. Any decrease in funding would delay completion of one or more of these active projects	3,807	15,024	4,017

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
■ Transmission line and terminal work for others in FY 2001 includes construction of: ▸ The Black Mountain-Del Bac TL (Arizona) in the Central Arizona Project for the Bureau of Reclamation, pending resolution of Native American issues; ▸ Interconnection facilities for the Blythe, Griffith and South Point Energy Projects; and Southern Nevada Water Authority (Arizona); ▸ Interconnection facilities for the City of Lodi (California); ▸ Interconnection facilities for Calpine Corporation's Sutter Powerplant (California); ▸ NTUA-Shiprock 115-kV interconnection for the Navajo Tribal Utility Authority (New Mexico). Western's work for others has increased significantly under the open access to transmission mandates in the FERC Orders Nos. 888 and 889. These mandates require Western to provide access to its transmission system; the projects typically surface quickly and provide little advance warning for internal planning and budgeting. Western does not have the discretion to not participate.			
Western expects interconnection projects funded by the project proponents to become increasingly common in the next few years. Design of these facilities must be closely coordinated with, or accomplished by, our design staff in order to ensure compatibility with Western's equipment and facilities and compliance with applicable electrical and safety codes. Interconnection projects also affect transmission system loading and operation; potential impacts to other system facilities and equipment must be determined, since the cost of any necessary modifications should be borne by the interconnection project proponents	0	0	0
Total, Transmission Lines and Terminal Facilities	3,807	15,024	4,017

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001

Substations

- Complete the replacement of high-voltage equipment such as circuit breakers, transformers, reactors, disconnect switches, and fuses at: Casa Grande 02, ED-4, Gila 06 and Parker (Arizona); Haxtun (Colorado); Custer 03, Miles City MC-4, Rudyard and Yellowtail (Montana); Bismarck and Washburn (North Dakota); Beresford, Brookings, Summit 10, Winner and Woonsocket (South Dakota); and Badwater and Lovell 08 (Wyoming). This equipment requires replacement primarily due to reliability factors and age, safety concerns, escalating annual maintenance costs, and/or availability of spare parts. Oil containment is added when appropriate to protect nearby water resources from possible contamination. Complete demolition of Basic Substation (Arizona).

  The reactor replacements at Grand Island Substation (Nebraska) scheduled for FY 2000 will not occur; instead, the reactors purchased for Grand Island were rushed into service at New Underwood Substation (South Dakota) when identical old reactor banks there suddenly failed. This is an example of the planning and funding flexibility Western must exercise in order to maintain the reliability and integrity of the integrated power system. As a result, the Grand Island project remains in the new rehabilitation starts for FY 2001 below. The funding level is determined by estimating the cost to complete each project, and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience 7,130 5,454 439

(dollars in thousands)

FY 1999	FY 2000	FY 2001

- Substation rehabilitation starts planned in FY 2001 include:
  - Replace four 69-kV circuit breakers and associated disconnect switches, circuit and potential transformers, and modify lattice steel structures as necessary at Davis Switchyard (Arizona). The equipment dates to 1952, has exceeded its expected service life, and poses an unacceptable risk to system reliability. Replacement parts are no longer available, and the new equipment configuration would reduce safety hazards;
  - Add dedicated transformer power circuit breakers at Hayden Substation (Colorado). Addition of these breakers will allow maintenance of equipment without taking transmission lines out of service;
  - Add a 230/69-kV transformer and associated 230- and 69-kV bays to Denison Substation (Iowa) to provide necessary reliability for 69-kV service. Transfer capability in the region would be improved, and service would not be interrupted when one of the existing 161/69-kV transformers is down for maintenance, or should fail;
  - Replace the 115/69-kV transformer at Glendive Substation (Montana). This transformer was placed in service in 1945 and is gassing, indicating imminent catastrophic failure. The transformer is obsolete and replacement parts are unavailable;
  - Replace three aging reactors at Grand Island Substation (Nebraska). Failure of these reactor banks would cause unacceptable voltage levels which could damage other electrical equipment or precipitate an area outage. Originally included as a FY 2000 start, but delayed when the reactors obtained for this project had to be installed at New Underwood Substation (South Dakota) when identical reactor banks there suddenly failed;
  - Add two capacitor banks, a breaker and interrupter, and related switches, relays and buswork at Flandreau Substation (South Dakota). The additional capacitors were identified in a major transmission study as a requirement for maintaining stable system voltage in the area;

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
▸ Replace five circuit breakers and associated disconnect switches at Fort Thompson Substation (South Dakota). Also, add two transformer circuit breakers and associated disconnect switches, control equipment and buswork. The project will improve system reliability by replacing electrical equipment installed in 1962 and uprating breaker loading capability from 1600 to 2000 amps. The additional breakers would allow independent switching of the two existing transformers; both must now be out of service to switch, causing a brief outage;			
▸ Replace a 115/69-kV transformer, smaller circuit and potential transformers, the station service transformer, and add two transformer interrupter switches at Groton Substation (South Dakota). This equipment was installed in the 1950s and has exceeded its expected service life; replacement parts are no longer available. The work is necessary before catastrophic failure causes power outages and costly emergency replacement;			
▸ Replace power circuit breakers in substations at Hayden and Salida (Colorado); Yellowtail (Montana); and Alcova and Archer (Wyoming). Replace main transformers in substations at Lusk and Raderville (Wyoming). Replace station service transformers, remote terminal units and other electrical equipment at these substations.			
These substation starts address specific identified system reliability risks or operational problems. Estimates are based on actual costs of recent similar projects, including costs of equipment and services, data from specialized cost estimating guides, and organization experience. Any decrease in funding will cause one or more of these starts to be delayed, impacting outyear planning. Delays in planned construction projects increase the backlog of necessary work, increase the risk of equipment failure and system disruptions, and create increases in future budget years. The work cannot be avoided through delay, and must be accomplished before failure requires emergency replacement.	0	0	12,471

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
■ Work for others includes construction of the Lone Butte Substation for the San Carlos Irrigation Project, Bureau of Indian Affairs; Headgate Rock Dam breakers and equipment for the Aha Macaw Tribe (Bureau of Indian Affairs); Topock Substation for Arizona Power Pool Association (Arizona); and Flandreau Substation 08 for the City of Flandreau (South Dakota)	0	0	0
Total, Substations	7,130	5,454	12,910

Other

■ Continue to upgrade/replace/expand communication systems (supervisory control and data acquisition equipment, microwave, fiber optic and telecommunication) in the Central Valley Project and Pick-Sloan Missouri Basin Program to operate and control the transmission system. Replacement parts for the existing communications system are becoming very difficult to find and the increased use of remote control of facilities, coupled with the greater integration of the Federal system with the rest of the grid and technological advances in the communications field, makes secure and reliable communications crucial to Western's mission. Rapid advances in communications technology, along with manufacturers' phase-out of support for existing systems, primarily drive the need for communications replacements and upgrades. Effective control of remote facilities is crucial to the operation of the power system. Impacts from faulty communications can range from electric equipment damage to system-wide power flow problems, including black-outs. Funding level is determined by using recent actual costs, including equipment costs and construction contracts. Decreases to this line item will delay scheduled communications replacements, increase the possibility of communication system failures, and potentially contribute to system-wide power problems.	5,096	1,795	3,600

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
■ Complete adding fire protection at various maintenance facilities in the Western Division of the Pick-Sloan Missouri Basin Program, including the Virginia Smith Converter Station (Nebraska). Complete projects providing additional storage for housing vehicles, electrical equipment, and supplies that are presently being stored outside, subjected to adverse weather conditions at Western maintenance facilities at Phoenix (Arizona); Elverta and Keswick (California); Bismarck and Fargo (North Dakota); Armour, Huron and Pierre (South Dakota); and Casper (Wyoming). Complete a station service solar power source at Folsom (California) to reduce facility heating and cooling costs and support DOE renewable energy development goals. Construct an alternate control building at Cheyenne Substation (Wyoming), an FY 2001 new start. The existing control building is in very poor condition, is not adequate for modern substation monitoring and control equipment, and does not accommodate the need for an emergency alternate dispatch center. Annual power facility development costs are included in this section. Miscellaneous minor construction jobs, not normally scheduled in advance or anticipated as part of larger projects, are also included. The miscellaneous work is partly cosponsored. Each project cost is determined using the actual costs of recent similar projects, estimated quantities of needed materials, past contract costs, specialized cost estimating guides, and in-house experience. Power facility development costs are rigorously reviewed by Western's Maintenance, Design and Construction Council, and each activity is funded only if anticipated benefits clearly outweigh the costs.	4,769	4,129	2,588

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
■ The following projects will have active preconstruction activities during FY 2001: Parker Dam transformer replacement (California); Curecanti Substation transformer and breaker installation (Colorado); Creston Substation 08 additions and replacements (Iowa); Shiprock Substation transformer and breaker installation (New Mexico); Devils Lake maintenance building and Forman Substation 04 additions and replacements (North Dakota); Armour Substation 07 replacements, New Underwood Substation replacements, Philip Substation breaker replacements, Woonsocket Substation transformer replacement, and Watertown Substation transformer replacements (all in South Dakota). Funds for these activities are included in the Program Direction section of Western's request	0	0	0
Total, Other	9,865	5,924	6,188
Total, Construction and Rehabilitation	20,802	26,402	23,115

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Transmission Lines and Terminal Facilities	
■ The decrease for Transmission Lines is due to the completion of transmission line rehabilitation work, several additional active transmission line projects nearing completion and requiring less funding, and the lack of new transmission line rehabilitation starts in FY 2001	-11,007
Substations	
■ The increase in Substations is due to several substation rehabilitation starts in FY 2001. This substation work, consisting of necessary equipment replacement and additions, has been determined to be of higher priority for scheduling and funding than transmission line work in FY 2001	+7,456
Other	
■ Funding for microwave communications upgrades in the Pick-Sloan Missouri Basin Program and Colorado River Storage Project are responsible for the small increase	+264
Total Funding Change, Construction and Rehabilitation	-3,287

Purchase Power and Wheeling

Mission Supporting Goals and Objectives

The Western Area Power Administration buys non-Federal power and transmission services to sell to its customers. Non-Federal power and transmission service are substituted for hydro-generation when hydropower is unavailable because of drought conditions or other circumstances. Western's Central Valley Project (CVP) is legislatively authorized to market an additional 400 megawatts (MW) above Federal hydro-generation and purchase firming energy over the California-Oregon Intertie. As such, the CVP entered into long-term purchase power contracts to augment the Federal hydro resource as necessary to fulfill the contractual commitments to customers through the year 2004. In the past, this substitution of non-Federal power for Federal power has helped Western's efforts to market its products by increasing the dependability of Western's deliveries. However, under industry restructuring, a lively trading market for power has developed that enables customers of all utilities across the country to shop for power.

Western will seek to phase out, by the end of FY 2004, the amount of purchased power and wheeling (PPW) services financed through appropriations or offsetting collections. In addition, in FY 2001, as part of the phase out, Western will seek authority to utilize PPW revenues to finance those PPW activities previously funded by direct appropriations. In the future, Western may also continue to offer alternative mechanisms to customers for these activities.

The proposed authority for use of revenues to finance the PPW program provides an interim solution to Western's contractual PPW funding needs pending the reduction and eventual resolution of alternative financing constraints over the next four years. In the long term, Western anticipates financing through these alternative methods an increasing proportion of the PPW program. In the short term, however, several constraints, including contractual constraints, impede our and our customers' ability to negotiate these changes with suppliers. The most significant constraint is the lack of participation in bill crediting methods by a key long-term contract supplier of energy and transmission services to the Central Valley Project (CVP). The lack of participation impedes the ability of our customers to fund Western's PPW expenditures directly with this supplier.

Performance Measures

The PPW program supports the performance measures presented under Program Mission.

- The PPW program supports the Repayment of Power Investment measure by providing a more valuable firm resource to market. The increased value ensures a strong marketable product and dependable revenue stream which provides for the timely repayment of the taxpayer investment in the projects' power facilities. Full recovery of Western's and the generating agencies' annual costs allocated to power, including operation and maintenance, PPW, and interest to Treasury on unpaid project investment, is also ensured.

- The PPW program supports the Safety and Cost Growth measures by providing flexibility in meeting power delivery obligations while essential maintenance to either transmission or generation assets is underway, or while flood control flow regimes or other restrictions for public safety are in effect.
- While not directly related to the Transmission System Performance measure, the PPW program increases the reliability of the energy marketed in spite of external constraints to the hydropower system brought about by changing reservoir conditions, inflows, and variable flow regimes designed to respond to irrigation, navigation, fish and wildlife, and recreation needs.

Funding Schedule

Two funding schedules follow. The first shows the budgeted program requirement, consisting of new budget authority, use of prior year balances and offsetting collections, net of any alternative financing planned. The second illustrates the gross purchase power need including use of alternative financing methods.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Central Valley Project	48,977	36,224	30,700	-5,524	-15.2%
Pick-Sloan Missouri Basin and Other Programs	4,909	5,662	4,800	-862	-15.2%
Total, PPW	53,886	41,886	35,500	-6,386	-15.2%
Use of Prior Year Balances, Net	-170	-15,000	0	+15,000	+100.0%
Offsetting Collections Realized	0	0	-35,500	-35,500	N/A
Total, PPW Budget Authority	53,716	26,886	0	-26,886	-100.0%

Program Activity (Gross)

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Central Valley Project	105,527	101,236	94,755	-6,481	-6.4%
Pick-Sloan Missouri Basin and Other Programs	44,347	39,446	39,808	+362	+0.9%
Total, PPW (gross)	149,874	140,682	134,563	-6,119	-4.3%
Use of Alternative Financing					
Net Billing, Bill Crediting, Non-Federal Reimbursable	-75,988	-68,296	-62,646	+5,650	+8.3%
Reimbursable, Federal Contract Loads	-20,000	-18,500	-18,500	0	0.0%
Subtotal, Alternative Financing	-95,988	-86,796	-81,146	+5,650	+6.5%
Additional Off-budget Financing	0	-12,000	-17,917	-5,917	-49.3%
Total, PPW	53,886	41,886	35,500	-6,386	-15.2%
Use of Prior Year Balances, Net	-170	-15,000	0	+15,000	+100.0%
Offsetting Collections Realized	0	0	-35,500	-35,500	N/A
Total, PPW Budget Authority	53,716	26,886	0	-26,886	-100.0%

Detailed Program Justification

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Central Valley Project			
■ In FY 2001, Western seeks new authority to use offsetting collections to enable CVP to finance power purchase contractual commitments to its customers and suppliers (Pacific Gas & Electric, PacifiCorp, and Enron). Continuation of the program secures $180 million in revenue sales. As shown below, the customers are expected to provide significant financing, offsetting half of the appropriation requirement, for the energy, capacity, and wheeling services from suppliers. Total program amounts shown here are based primarily on contractual pricing and delivery terms negotiated in the long-term firm purchase agreements and to a lesser extent on market estimates for non-firm purchases. The decrease in FY 2001 reflects a reduction in the purchase requirements negotiated for one of the long-term firm purchase power contracts	105,527	101,236	94,755
■ Traditional alternative methods of financing are expected to provide $56,550,000 in FY 1999, $53,012,000 in FY 2000 and $47,000,000 in FY 2001. The decrease in FY 2001 reflects a reduction in bill-crediting due to a decrease in requirements from one of the participating long-term firm purchase power contract suppliers. An additional $12,000,000 and $17,055,000 in new alternative financing is assumed in the FY 2000 appropriation and FY 2001 request, respectively. Currently, existing alternative financing methods can provide for roughly half of the CVP PPW requirement. Alternative financing of the remainder is constrained predominantly by the lack of participation by a key long-term contract supplier of energy and transmission services to CVP. Other constraints arise due to monthly net billing limitations, limited supplier participation in off-budget methods, and uncertainty that cumbersome alternative methods can be responsive to new payment processes being established by the California ISO and PX.	-56,550	-65,012	-64,055
Total, Central Valley Project	48,977	36,224	30,700

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Pick-Sloan Missouri Basin and Other Programs			
■ In FY 2001, Western intends to honor its long-term power sale contractual commitments to customers of the Eastern and Western Divisions of the Pick-Sloan Missouri Basin Program, the Fryingpan-Arkansas Project, and the Provo River Project. Continuation of the program through use of offsetting collections secures $271 million in revenue sales. As shown below, the customers are expected to provide significant financing, offsetting most of the total funding requirement, for the energy, capacity, and wheeling services from suppliers. The total program estimates shown are based primarily on Corps of Engineers' firming resource estimates, market pricing of short-term firm energy, and negotiated transmission rates. The slight increase reflects a subtle decrease in the generation forecast from relatively strong water conditions over the last few years	44,347	39,446	39,808
■ Traditional alternative methods of financing are expected to provide $39,438,000 in FY 1999, $33,784,000 in FY 2000 and $34,146,000 in FY 2001. An additional $862,000 in new alternative financing arrangements is assumed in FY 2001. Currently, existing alternative authorities can provide for roughly 86- to 89- percent of the Pick-Sloan Missouri Basin PPW program. The remainder is constrained by monthly net billing ceilings, limited supplier base, and limited supplier capability during seasonal peak periods requiring purchases outside the local marketing area.	-39,438	-33,784	-35,008
Total, Pick-Sloan Missouri Basin and Other Programs	4,909	5,662	4,800
Total, Purchase Power and Wheeling	53,886	41,886	35,500

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Central Valley Project	
■ The overall gross PPW requirement of $94,755,000 in FY 2001 is decreasing by $6,481,000 from the $101,236,000 level in FY 2000. The overall reduction is due to a contractual decline in energy purchases from one of the long-term power suppliers in order to lower the cost of the PPW program to CVP customers. The portion funded through alternative financing methods, however, is also decreasing from FY 2000 estimates by $957,000, resulting in a net decrease in the FY 2001 PPW program of $5,524,000. The reduction in alternative financing is due to the change in purchases noted for the above supplier, reducing Western's bill crediting program by $6,012,000. The decrease is offset by a $5,055,000 assumption of additional direct customer financing, bringing the total CVP direct customer financing requirement to $17,055,000 in FY 2001.	-5,524
Pick-Sloan Missouri Basin and Other Programs	
■ Initiation of direct customer financing of $862,000 is assumed to begin in FY 2001, increasing the alternative financing capability, and lowering the previous Federal funding requirement from $5,662,000 to $4,800,000.	-862
Total Funding Change, Purchase Power and Wheeling Budget Authority	-6,386

Utah Mitigation and Conservation

Mission Support Goals and Objectives

The Reclamation Projects Authorization and Adjustment Act of 1992, Title IV, established the Utah Reclamation Mitigation and Conservation Account (Account) in the Treasury of the United States. The purpose of this Account is to ensure that the level of environmental protection, mitigation, and enhancement achieved in connection with projects identified in the Act and elsewhere in the Colorado River Storage Project in the State of Utah is preserved and maintained. The Administrator of Western Area Power Administration (Western) is authorized to deposit funds into the Account. Such expenditures are to be considered nonreimbursable and nonreturnable. The Utah Reclamation Mitigation and Conservation Commission, established under Title III of the Act, is authorized to administer all funds deposited into the Account.

Funding Schedule

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Total, Utah Mitigation and Conservation Budget Authority	5,036	5,036	5,036	0	0.0%

Detailed Program Justification

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Utah Mitigation and Conservation			
■ A flat-line deposit will be made into the Utah Reclamation Mitigation and Conservation account	5,036	5,036	5,036
Total, Utah Mitigation and Conservation	5,036	5,036	5,036

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Utah Mitigation and Conservation	
■ There is no change to this Account	0
Total Funding Change, Utah Mitigation and Conservation	0

Colorado River Dam Fund, Boulder Canyon Project

Funding Profile

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Original Appropriation	FY 2000 Adjustments	FY 2000 Current Appropriation	FY 2001 Request
Boulder Canyon Project					
Program Direction	0	3,673	0	3,673	4,411
Equipment, Contracts and Related Expenses	0	498	0	498	519
Total, Boulder Canyon Project	0	4,171	0	4,171	4,930
Planned Use of Prior Year Balances	0	0	0	0	0
Permanent Appropriation, CRDF	0	-4,171	0	-4,171	-4,930
Total, Boulder Canyon Permanent Budget Authority	0	0	0	0	0

Public Law Authorizations:

Public Law 70-642, "Boulder Canyon Project Act" (1928)
Public Law 75-756, "Boulder Canyon Project Adjustment Act" (1940)
Public Law 95-91, "Department of Energy Organization Act" (1977)
Public Law 98-381, "Hoover Power Plant Act of 1984"

Funding by Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Western Area Power Administration	0	4,171	4,930	+759	+18.2%
Planned Use of Prior Year Balances	0	0	0	0	N/A
Permanent Appropriation, CRDF	0	-4,171	-4,930	-759	-18.2%
Total, Boulder Canyon Project	0	0	0	0	N/A

Site Description

Hoover Dam, the highest and third largest concrete dam in the United States, sits on the Colorado River along the Arizona-Nevada border. Lake Mead, the reservoir formed behind Hoover Dam, is still the nation's largest manmade reservoir. The reservoir can hold a two-year supply of average flow of the Colorado River with its storage capacity of 27.38 million acre-feet.

This enormous project began with 1928 legislation approving construction of the Boulder Canyon Project. Hoover Powerplant has 19 generating units and an installed capacity of 2,064,000 kilowatts.

High-voltage transmission lines and substations make it possible for people from southern Nevada, Arizona and southern California to receive power from the project.

Since the start of commercial power generation in 1938, Hoover, with yearly average generation of 4.5 billion kilowatt-hours, has served the annual electrical needs of nearly 8 million people. This power is marketed under the Hoover Power Plant Act of 1984 and the 1984 Conformed General Consolidated Power Marketing Criteria or Regulations for Boulder City Area Projects. Western Area Power Administration markets and transmits Boulder Canyon power, and operates and maintains its transmission facilities.

Boulder Canyon Project Program Direction

Mission Supporting Goals and Objectives

The Boulder Canyon Project (Project) consists primarily of Hoover Dam, its powerplant, and the associated substations and transmission facilities. Revenues from the sale of Project electric energy and capacity are deposited in the Colorado River Dam Fund (CRDF), administered by the Department of the Interior, and are available without further appropriation. Beginning in FY 2000, Western Area Power Administration (Western) will finance the Boulder Canyon Project operations directly from the CRDF under the authority of the Hoover Powerplant Act of 1984. Previously, this Project was included in Western's Construction, Rehabilitation, Operation and Maintenance (CROM) account, and funds were provided from the CRDF by transfer. FY 1999 expenses will be covered by transfer of previously authorized funding from the CRDF. Revenues that are collected in excess of expenses are used for repayment of investments to the U.S. Treasury.

Western operates and maintains the transmission system for the Project to ensure an adequate supply of reliable electric power in a clean and environmentally-safe, cost-effective manner. Western achieves continuity of service by maintaining its power systems at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, and performing clean-up activities. Western maximizes revenues gained from non-firm energy sales. In concert with our customers, Western reviews required replacements to its existing infrastructure to sustain reliable power delivery to our customers and to contain annual maintenance expenses.

Performance Measures

The Program Direction activities of the Project support the performance measures presented under Program Mission.

- Highly-skilled staff respond to minute-by-minute load changes to meet or exceed North American Electric Reliability Council and industry averages for Transmission System Performance. Craftsmen maintain or replace equipment to assure its capability for reliable delivery of power. The crews also rapidly restore the system following any disturbance.
- Program Direction activities support Western's Safety measurement by making safety a priority in each and every task because of the extreme hazards associated with a high-voltage electrical system. Safety is not a separate program but is integrated into all procedures and jobs.
- The Cost Growth measurement is a direct reflection of Western's commitment to optimize economical operation and maintenance of the interconnected high-voltage power system, including the associated Program Direction activities, while not compromising the reliability of power deliveries. Controlling costs is vital to the continuing health of our organization as we move into an era of increased competition. High costs contribute to higher rates, reducing our competitive position and that of our customers.

- Program Direction activities support the Repayment of Power Investment measurement by providing 24-hour/day reliable electric power delivery to our customers.

Funding Schedule

(dollars in thousands, whole FTEs)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Salary & Benefits	0	1,965	2,444	+479	+24.4%
Travel	0	140	153	+13	+9.3%
Support Services	0	286	440	+154	+53.8%
Other Related Expenses	0	1,282	1,374	+92	+7.2%
Total, Program Direction	0	3,673	4,411	+738	+20.1%
Planned Use of Prior Year Balances	0	0	0	0	N/A
Permanent Appropriation, CRDF	0	-3,673	-4,411	-738	-20.1%
Total, Program Direction Permanent Budget Authority	0	0	0	0	N/A
Full-Time Equivalents (FTE)	0	26	30	+4	+15.4%

Detailed Program Justification

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Salary & Benefits			
Salaries and benefits are provided for 30 Federal employees to operate and maintain, on a continuing basis, the Project's high-voltage transmission facilities, including approximately 58 miles of high-voltage transmission lines, four substations and associated switchyards, communication, control and general plant facilities associated with this Project. Staff provide continuing services such as system operations and load dispatching, power billing and collection, power marketing, general power resources planning, energy services, technology transfer, environmental, safety, security and emergency management activities. Four additional staff have been budgeted directly to this Project beginning in FY 2001 to accommodate industry changes such as mandatory industrywide interchange schedule tagging, new Western Systems Coordinating Council (WSCC) and North American Electric Reliability Council (NERC) reporting requirements for reliability management systems and compliance processes, and to implement new marketing participant agreements. Interchange schedule tagging is required by NERC for each scheduled energy transaction, detailing actual owners and buyers, losses, the energy path (coming from and going to) and energy profiles. Because of the close proximity to the Four Corners area and the California ISO, the Desert Southwest Region (including this Project) is heavily engaged in these activities. A 4-percent inflation factor has been applied	0	1,965	2,444
Travel			
Transportation and per diem allowance for day-to-day performance of duties of Federal staff, including crews who maintain the Project transmission facilities continue. Also includes transportation of things. Estimates are based on historical travel costs, adjusted for inflation and planned activity, to reliably maintain the transmission system	0	140	153

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Support Services			
Support services funded in this activity include automated data processing, warehousing, computer-aided drafting/engineering, and general administrative support. The increase is primarily attributed to the addition of a contract for software maintenance for the supervisory control and data acquisition system in the Desert Southwest Region which supports interchange schedule tagging and power system accounting activities.	0	286	440
Other Related Expenses			
Other related expenses including but not limited to, rental space, utilities and miscellaneous charges, printing and reproduction, training tuition, maintenance and repair of office equipment, supplies and materials, personal computers, telecommunications, multi-project costs, and distribution of Western's general management costs continue. Rental space costs assume the GSA-inflation factor, adjusted by the number of employees funded in this Account. Other costs are based on historical usage and actual cost of similar items	0	1,282	1,374
Total, Program Direction	0	3,673	4,411

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Salary and Benefits	
■ Increase reflects application of 4-percent inflation factor and addition of four staff members to accommodate industry changes such as tagging, new WSCC and NERC reporting requirements, and implementation of new marketing participant agreements .	+479
Travel	
■ Increase in travel is attributed to additional staff working on activities in this Project .	+13
Support Services	
■ Increase is primarily attributed to the addition of a contract for software maintenance for the supervisory control and data acquisition system supporting industry restructuring interchange schedule tagging and power system accounting activities in the Desert Southwest Region	+154

	FY 2001 vs FY 2000 ($000)
Other Related Expenses	
■ Increase is primarily attributed to this Project receiving an increased distribution of Western's general management costs due to increased staff levels	+92
Total Funding Change, Program Direction	+738

Support Services

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Technical Support Services					
Economic and Environmental Analysis	0	0	0	0	N/A
Test and Evaluation Studies	0	0	0	0	N/A
Total, Technical Support Services	0	0	0	0	N/A
Management Support Services					
Management Studies	0	4	5	+1	+25.0%
Training and Education	0	2	4	+2	+100.0%
ADP Support	0	116	244	+128	+110.3%
Administrative Support Services	0	164	187	+23	+14.0%
Total, Management Support Services	0	286	440	+154	+53.8%
Total, Support Services	0	286	440	+154	+53.8%

Other Related Expenses

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Training	0	37	42	+5	+13.5%
Working Capital Fund	0	9	13	+4	+44.4%
Printing and Reproduction	0	3	4	+1	+33.3%
Rental Space	0	70	75	+5	+7.1%
Software Procurement/Maintenance Activities/Capital Acquisitions	0	113	110	-3	-2.7%
Other	0	1,050	1,130	+80	+7.6%
Total, Other Related Expenses	0	1,282	1,374	+92	+7.2%

Equipment, Contracts and Related Expenses

Mission Supporting Goals and Objectives

The Boulder Canyon Project (Project) is comprised of power marketing, operation, and maintenance of transmission facilities, located primarily in Nevada. Beginning in FY 2000, these activities are paid for using Colorado River Dam Fund (CRDF) revenues directly. Previously, this Project was included in Western Area Power Administration's (Western) Construction, Rehabilitation, Operation and Maintenance (CROM) account, and funds were provided from the CRDF by transfer.

Western operates and maintains the transmission system for the Project to ensure an adequate supply of reliable electric power in a clean and environmentally-safe, cost-effective manner. Western achieves continuity of service by maintaining its power systems at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, and performing clean-up activities. In concert with our customers, Western reviews required replacements to its existing infrastructure to sustain reliable power delivery to our customers and to contain annual maintenance expenses.

Supplies and materials, such as wood poles, instrument transformers, meters and relays, must be procured to provide necessary resources to respond to routine and emergency situations in the Project's transmission facilities. Technical services, such as waste management disposal, environmental impact analyses, and pest and weed control, are utilized as needed.

Performance Measures

The Equipment, Contracts and Related Expenses activity of the Project supports the performance measures presented under Program Mission.

- Well-maintained equipment, the availability of resources to rapidly restore service following any system disturbance, and the ability of staff to respond to minute-by-minute changes in load requirements are all directly tied to the Transmission System Performance measure.
- This activity also supports the Safety measurement. Each maintenance activity begins with a discussion of safe working procedures. Additionally, safety of the public and Western's personnel is considered when replacing equipment.
- The Cost Growth measurement is a direct reflection of Western's commitment to optimize economical operation and maintenance of the interconnected high-voltage power system while not compromising the reliability of power deliveries. Controlling costs is vital to the continuing health of our organization as we move into an era of increased competition. High costs contribute to higher rates, reducing our competitive position.

- The Repayment of Power Investment measurement is supported by providing 24-hour/day reliable electric power delivery to our customers, thus enhancing revenues and repayment of Project expenses and investment.

Funding Schedule

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Equipment, Contracts and Related Expenses	0	498	519	+21	+4.2%
Planned Use of Prior Year Balances	0	0	0	0	N/A
Permanent Appropriation, CRDF	0	-498	-519	-21	-4.2%
Total, Equipment, Contracts and Related Expenses Permanent Budget Authority	0	0	0	0	N/A

Detailed Program Justification

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Equipment, Contracts and Related Expenses			
■ Supplies and materials necessary to respond to routine and emergency situations in the Project's high-voltage transmission facilities will be procured. The request is based on projected work plans for activities and historical data of actual supplies needed to maintain the transmission system reliably. Costs are based on recent procurements of similar items.	0	498	519
Total, Equipment, Contracts and Related Expenses	0	498	519

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Equipment, Contracts and Related Expenses	
■ The increase is attributed to a slightly higher level of purchases of supplies and materials as staff focus on needed routine maintenance of the existing facilities. In the recent past some staff were involved in construction commissioning activities in other power systems; thus maintenance activities were somewhat curtailed	+21
Total Funding Change, Equipment, Contracts and Related Expenses	+21

FY 2001 COMPARABILITY MATRIX

FY 1999 Current Appropriation

(Dollars in Thousands)

		NEW STRUCTURE							
	FY 2001 CB STRUCTURE	CROM Program Direction	CROM O&M	CROM C&R	CROM PP&W	CROM Utah	Bldr.Can. Program Direction	Bldr.Can. Equip & Contracts	Total
FY 1999 CURRENT STRUCTURE	Program Direction	$103,115					$3,875		$106,990
	O&M		$36,011					$458	$36,469
	C&R			$20,802					$20,802
	PP&W				$53,886				$53,886
	Utah					$5,036			$5,036
	Total Program	$103,115	$36,011	$20,802	$53,886	$5,036	$3,875	$458	$223,183
	Use of PY Balances	-11,870	-2,358	-1,845	-170	0	-3,875	-458	-20,576
	Total BA	$91,245	$33,653	$18,957	$53,716	$5,036	$0	$0	$202,607

Falcon and Amistad Maintenance Fund

Funding Profile

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Original Appropriation	FY 2000 Adjustments	FY 2000 Current Appropriation	FY 2001 Request
Falcon and Amistad Operating and Maintenance Expenses	994	1,309	0	1,309	2,670
Total, Falcon And Amistad Budget Authority	994	1,309	0	1,309	2,670

Public Law Authorization:

Public Law 103-236, "Foreign Relations Authorization Act, Fiscal Years 1994 and 1995"
The Act of June 18, 1954 (68 Stat. 255)

Funding by Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Western Area Power Administration	994	1,309	2,670	+1,361	+104.0%
Total, Falcon and Amistad Maintenance Fund	994	1,309	2,670	+1,361	+104.0%

Site Description

The Falcon-Amistad Project consists of two international storage projects located on the Rio Grande River between Texas and Mexico. The United States and Mexico share and operate separate powerplants on each side of the Rio Grande River. The power output is divided evenly between the two nations. The State Department's International Boundary and Water Commission (IBWC) owns and operates the U.S. portion of the projects.

Falcon Dam is located about 130 miles upstream from Brownsville, Texas. The United States' portion of construction, operation and maintenance was authorized by Congress in 1950. Construction was started in that year and completed in 1954. The United States' share of Falcon Powerplant capacity is 31,500 kilowatts. The powerplant came on line in 1954.

Amistad Dam is located about 300 miles upstream from Falcon Dam. The Amistad Powerplant was constructed by the U.S. Army Corps of Engineers, as agent for the IBWC. The United States' portion of construction, operation and maintenance was authorized by the Mexican-American Treaty Act of 1950. Amistad Dam was completed in 1969. Its two generating units, with a generation capacity of 66,000 kilowatts, came on line in 1983.

Project power is marketed to two cooperatives in south Texas via Central Power and Light Company's transmission system. There is no Federal transmission associated with these two projects.

Repayment is made through annual installments. These installments are established in advance by Western Area Power Administration (Western) and the customers on or before August 31 of the year preceding the appropriate fiscal year. Each annual installment pays the amortized portion of the U.S. investment in the Falcon and Amistad hydroelectric facilities with interest, and associated operation, maintenance and administrative costs. This repayment schedule does not depend upon the amount of power and energy delivered or the amount of generation each year.

Mission Supporting Goals and Objectives

The Falcon and Amistad Operating and Maintenance Fund (Maintenance Fund) was established in the Treasury of the United States as directed by the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995. The Maintenance Fund is administered by the Administrator of Western for use by the Commissioner of the U. S. Section of the IBWC to defray administrative, operation, maintenance (O&M), replacements and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams.

The Falcon/Amistad Dams hydroelectric power generation plants sell generated power to public utilities through Western. The two powerplants have a combined generating capacity of 97.5 megawatts.

All revenues collected in connection with the disposition of electric power generated at the Falcon and Amistad Dams, except monies received from the Government of Mexico, are credited to the Maintenance Fund. Revenues collected in excess of expenses are used to repay, with interest, the cost of replacements and original investments.

Full funding will support 24-hour/day operation and maintenance of the two powerplants to ensure response to ever-changing water conditions, customer demand, and continual coordination with operating personnel of the Government of Mexico. In addition, power will be marketed, repayment studies will be completed, and revenues collected. The Federal staff funded under this program continue to be allocated to the U. S. Section of the IBWC by the Department of State.

Performance Measures

The Falcon and Amistad Maintenance program supports the Performance Measures as presented under Program Mission.

- The Falcon and Amistad Maintenance program supports the Cost Growth measure by optimizing economic O&M of the hydroelectric facilities while not compromising the reliability of power deliveries.
- The program also supports the Repayment of Power Investment measure by providing 24-hour/day reliable electric power delivery to the customers, ensuring planned principal payments to the Treasury.

Funding Schedule

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Falcon and Amistad Maintenance Fund	994	1,309	2,670	+1,361	+104.0%
Total, Falcon and Amistad	994	1,309	2,670	+1,361	+104.0%

Detailed Program Justification

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Falcon and Amistad Maintenance Fund			
■ Salaries and benefits are provided for 22 employees of the U.S. Section of the IBWC who operate and maintain the two powerplants on a 24-hour/day basis, including planned maintenance activities and required safety services.	977	1,154	1,249
■ Routine services such as inspection and service of the CO2 and HVAC systems, elevators, self-contained breathing apparatus, calibration of test equipment, rewinding of motors, and repair of obsolete equipment when replacement parts are no longer available will be provided. Additionally, upgrades, replacement or rehabilitation of equipment such as control room recorders, station service batteries, and AC-DC inverters will occur. In FY 2001, extensive rehabilitation is needed to protect steel structures essential to turbine operation at the Falcon Dam and Powerplant. Trash racks (metal dam structures) will be sandblasted and painted, and a three-year project to sandblast and recoat penstocks will commence. Additionally, the governor electronics of Unit No. 1 at Amistad will be upgraded. These critical powerhouse structures must be protected to ensure the integrity of the project and to assure continued safe operation	0	114	1,274
■ Miscellaneous expenses for IBWC employees and technical advisors, including travel, training, communications, utilities and printing	0	16	121
■ Costs for marketing power, administration of power contracts, and preparation of rate and repayment studies	17	25	26
Total, Falcon and Amistad	994	1,309	2,670

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Falcon and Amistad Maintenance Fund	
■ The increased funding is necessary for deferred equipment purchases, upgrades and replacements, extensive rehabilitation of turbine structures, penstocks, and trash racks .	+1,160
■ The increase in salaries and benefits is due to application of a 4-percent salary increase and increased overtime costs due to shortage of personnel	+95
■ Increases in miscellaneous costs are primarily attributed to meeting OSHA and other travel and training requirements. Training has been nearly eliminated in previous years because of higher priorities and is required for governor training, high voltage distribution system maintenance training, and other OSHA and maintenance skills training. Travel increases for attendance at the training sessions and for the power-portion share of costs for technical advisors to inspect the sinkholes near the Amistad Dam and Powerplant	+106
Total Funding Change, Falcon and Amistad Maintenance Fund	+1,361

Colorado River Basins Power Marketing Fund

Funding Profile

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Original Appropriation	FY 2000 Adjustments	FY 2000 Current Appropriation	FY 2001 Request
Colorado River Basins Power Marketing Fund					
Program Direction	26,478	29,298	0	29,298	31,355
Equipment, Contracts and Related Expenses	74,183	84,293	0	84,293	83,354
Total, Operating Expenses	100,661	113,591	0	113,591	114,709
Offsetting Collections Realized	-116,759	-134,591	0	-134,591	-135,709
Total, Obligational Authority	-16,098	-21,000	0	-21,000	-21,000

Public Law Authorizations:

Public Law 75-529, "The Fort Peck Project Act of 1938"
Public Law 84-484, "The Colorado River Storage Project Act of 1956"
Public Law 90-537, "The Colorado River Basin Project Act of 1968"
Public Law 95-91, "Department of Energy Organization Act" (1977)

Funding by Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Western Area Power Administration	100,661	113,591	114,709	+1,118	+1.0%
Offsetting Collections Realized	-116,759	-134,591	-135,709	-1,118	-1.0%
Total, Colorado River Basins Power Marketing Fund	-16,098	-21,000	-21,000	0	0.0%

Site Description

The Colorado River Basins Power Marketing Program is comprised of three power systems: the Colorado River Storage Project, including the Dolores and Seedskadee Projects; the Fort Peck Project; and the Colorado River Basin Project, including the Central Arizona Project. Western Area Power Administration is responsible for construction, maintenance, and operation of facilities for transmitting and marketing the electrical energy generated in these power systems. A brief description of each follows.

The **Colorado River Storage Project** (CRSP) was authorized in 1956. It consists of four major storage units: Glen Canyon, on the Colorado River in Arizona near the Utah border; Flaming Gorge on the Green River in Utah near the Wyoming border; Navajo on the San Juan River in northwestern New Mexico near the Colorado border; and the Wayne N. Aspinall unit on the Gunnison River in west-central Colorado.

CRSP has a combined storage capacity which exceeds 33.5 million acre-feet. Five Federal powerplants associated with the project, with 16 generating units, have an operating capacity of 1,710,000 kilowatts. CRSP provides for the electrical needs of more than a million people spread across Colorado, Utah, New Mexico and Arizona. Portions of southern California, Nevada and Wyoming are also served by CRSP power.

The **Dolores Project**, located in Montezuma and Dolores counties in southwestern Colorado, and the **Seedskadee Project**, located in southwestern Wyoming, were authorized as participating projects of CRSP. Dolores, a multipurpose project, provides 12.8 megawatts of installed power generating capacity along with municipal and industrial water, irrigation water, and recreation and fish and wildlife enhancement. The Dolores Project powerplants at McPhee Dam and the Towaoc Canal produce 1,283 and 11,495 kilowatts, respectively. Seedskadee's power facilities, associated with the project's Fontenelle Dam, include an 11.5-megawatt powerplant, switchyard and necessary transmission lines to interconnect with the CRSP transmission system at Flaming Gorge Powerplant.

The **Central Arizona Project** (CAP), one of three related water development projects that make up the Colorado River Basin Project, was authorized to furnish irrigation and municipal water supplies to Arizona and New Mexico, and for other purposes. The Navajo Generating Station, located near Lake Powell at Page, Arizona, has three coal-fired steam electric generating units for a combined capacity of 2.25 million kilowatts. The Federal share of the capacity (24.3 percent) is used to power the pumps that move Colorado River water through CAP canals. Surplus generation is marketed by Salt River Project pursuant to an agreement with Western.

The **Fort Peck Project**, located on the Missouri River in northeastern Montana, was begun under an Executive Order in October 1933 as part of the Public Works Administration. The Fort Peck Project Act of 1938 authorized the completion, maintenance and operation of the project, and the Flood Control Act of 1944 authorized integration of operation of the project with the Pick-Sloan Missouri Basin Program to serve a common market area. Installed generating capacity of the 5 units is 218 megawatts which is delivered primarily to customers in eastern Montana and western North Dakota.

Colorado River Basins Power Marketing Fund
Program Direction

Mission Supporting Goals and Objectives

The Colorado River Basins Power Marketing Program (Program) is comprised of the three power systems described earlier. This program is funded through Western Area Power Administration's (Western) business-type revolving fund (Federal Enterprise Fund), the Colorado River Basins Power Marketing Fund.

Revenues from the sale of electric energy and capacity replenish the fund and are available for expenditure for operation, maintenance, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses. Power sales and other revenues, which are collected in excess of expenses, are used for repayment of investments to the U.S. Treasury. This request represents Western's estimate of obligations to finance these business-type operations.

Western operates and maintains the transmission system for the Projects funded in this account to ensure an adequate supply of reliable electric power in a clean and environmentally-safe, cost-effective manner. Western achieves continuity of service by maintaining its power systems at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from non-firm energy sales. In concert with our customers, Western reviews required replacements to its existing infrastructure to sustain reliable power delivery to our customers and to contain annual maintenance expenses.

Performance Measures

The Program Direction activities support the performance measures presented earlier under Western Area Power Administration's Program Mission.

- Highly-skilled staff respond to minute-by-minute load changes to meet or exceed North American Electric Reliability Council industry averages for Transmission System Performance. Craftsmen maintain or replace equipment to assure its capability for reliable delivery of power. The crews also rapidly restore the system following any disturbance.
- Program Direction activities support Western's Safety measurement by making safety a priority in each and every task because of the extreme hazards associated with a high-voltage electrical system. Safety is not a separate program but is integrated into all procedures and jobs.
- The Cost Growth measurement is a direct reflection of Western's commitment to optimize economic operation and maintenance of the interconnected high-voltage power system, including associated Program Direction activities, while not compromising the reliability of power deliveries. Controlling

costs is vital to the continuing health of our organization as we move into an era of increased competition. High costs contribute to higher rates, reducing our competitive position.

- Program Direction activities support the Repayment of Power Investment measurement by providing 24-hour/day reliable electrical power delivery to our customers and maximizing revenues from non-firm power sales.

Funding Schedule

(dollars in thousands, whole FTEs)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Salary & Benefits	13,501	16,260	16,552	+292	+1.8%
Travel	1,182	1,388	1,400	+12	+0.9%
Support Services	1,647	2,138	2,579	+441	+20.6%
Other Related Expenses	10,148	9,512	10,824	+1,312	+13.8%
Total, Program Direction	26,478	29,298	31,355	+2,057	+7.0%
Full-Time Equivalents (FTE)	161	189	185	-4	-2.1%

Detailed Program Justification

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Salary and Benefits			
Salaries and benefits will be provided for 185 Federal employees that operate and maintain Western's high-voltage transmission system and associated facilities, and those that plan, design, and supervise the replacements and upgrades (capital investments) to the transmission facilities. Dispatchers and craftsmen operate and maintain the Program's high-voltage integrated transmission system comprised of approximately 4,000 circuit-miles of transmission lines and associated substations, switchyards, communication, control, and general plant facilities. Staff provide continuing services such as system operations, power billing and collection, power marketing, energy services, technology transfer, environmental, safety, security and emergency management activities. Additionally, a portion of costs associated with 24-hour-a-day operation of power dispatching and security centers is included. A 4-percent inflation factor has been applied	13,501	16,260	16,552

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
Travel			
Transportation and per diem allowance for day-to-day performance of duties of Federal staff, including crews who maintain the transmission facilities will continue. Also includes transportation of things. Estimates are based on historical travel costs, adjusted for anticipated escalation of airline fares, and planned activity	1,182	1,388	1,400
Support Services			
Support services funded in this activity include automated data processing, warehousing, computer-aided drafting/engineering, and general administrative support. The request is based on exercising the one-year option for the current level of contract support and an additional requirement for hardware and software support of supervisory control and data acquisition systems in Rocky Mountain and Desert Southwest Regions to support industry changes including interchange schedule tagging and power system accounting activities	1,647	2,138	2,579
Other Related Expenses			
Other related expenses, including but not limited to, space, utilities and miscellaneous charges, printing and reproduction, training tuition, maintenance of office equipment, supplies and materials, telecommunications, personal computers, multi-project costs, distribution of Western's general management costs and a portion of the costs received from National Archive and Records Administration (NARA) will continue. Rental space costs assume the GSA-inflation factor, adjusted by the number of employees funded in this Account. Other costs are based on historical usage and actual costs of similar items	10,148	9,512	10,824
Total, Program Direction	26,478	29,298	31,355

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Salary and Benefits	
■ Increase in salaries and benefits reflects the application of a 4-percent inflation factor, offset by a decrease of four FTE. The work plans for Western's workforce are prioritized based on criticality and crosses all funding accounts. Therefore, fluctuations in number of FTE required to perform the work in any given account may occur from year to year..	+292
Travel	
■ Increase in travel is attributed to inflationary increases, offset by a slight reduction based on anticipated work plans	+12
Support Services	
■ Increase in support services is primarily attributed to an additional requirement for hardware and software support for Western's supervisory control and data acquisitions systems in Rocky Mountain and Desert Southwest Regions. These systems support industry restructuring interchange schedule tagging and power system accounting activities	+441
Other Related Expenses	
■ Increase in other related expenses is primarily attributed to increases in multi-project and Western's general management costs. Multi-project costs are now based on the number of supervisory control and data acquisition points within the power system, resulting in an increase for systems funded within this account. General management costs increase because overtime is now included in the distribution base	+1,312
Total Funding Change, Program Direction	+2,057

Support Services

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Technical Support Services					
Economic and Environmental Analysis	0	0	0	0	N/A
Test and Evaluation Studies	0	0	0	0	N/A
Total, Technical Support Services	0	0	0	0	N/A
Management Support Services					
Management Studies	73	35	42	+7	+20.0%
Training and Education	19	20	46	+26	+130.0%
ADP Support	525	1,053	1,521	+468	+44.4%
Administrative Support Services	1,030	1,030	970	-60	-5.8%
Total, Management Support Services	1,647	2,138	2,579	+441	+20.6%
Total, Support Services	1,647	2,138	2,579	+441	+20.6%

Other Related Expenses

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Training	135	126	128	+2	+1.6%
Working Capital Fund	61	61	78	+17	+27.9%
Printing and Reproduction	11	11	12	+1	+9.1%
Rental Space	423	510	471	-39	-7.6%
Software Procurement/Maintenance Activities/Capital Acquisitions	1,469	786	905	+119	+15.1%
Other	8,049	8,018	9,230	+1,212	+15.1%
Total, Other Related Expenses	10,148	9,512	10,824	+1,312	+13.8%

Equipment, Contracts and Related Expenses

Mission Supporting Goals and Objectives

Western Area Power Administration's (Western) operation and maintenance activity supports the Department of Energy's Strategic Plan to promote secure, competitive, and environmentally-responsible energy systems that serve the needs of the public. Western ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its service territory by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from ancillary services and non-firm energy sales.

The Colorado River Basins Power Marketing Program is comprised of power marketing, operation, and maintenance of transmission facilities of three power systems described in the Site Description section earlier. These activities are funded in Western's business-type revolving fund (Federal Enterprise Fund), the Colorado River Basins Power Marketing Fund.

Revenues from the sale of electric energy and capacity replenish the fund and are available for expenditure for operation, maintenance, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses.

Supplies and materials, such as wood poles, instrument transformers, meters and relays, must be procured to provide necessary resources to respond to routine and emergency situations in the high-voltage interconnected transmission system. Technical services, such as waste management disposal, environmental impact analyses, and pest and weed control, are utilized as needed.

Western's planned replacement and addition activity is based on an assessment of age and the maintenance frequency/problems of individual items of equipment, availability of replacement parts, safety of the public and Western's personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western's power customers who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e. electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relays and oscillographs must be acquired to assure reliable service to Western's customers. System age and environmental concerns necessitate orderly replacement before significant problems develop.

Replacement and upgrade of microwave, supervisory control and data acquisition, and other communication and control equipment continues to provide increased system reliability, and reduce maintenance and equipment costs.

Capitalized movable equipment such as special purpose vehicles (e.g., cranes, auger trucks, manlifts), special purpose equipment (e.g., pole trailers, industrial tractors, brush chippers), specialized test

equipment (e.g., motion analyzers and ductor tester equipment), computer-aided engineering equipment, office equipment, ADP equipment and software must be upgraded and replaced.

Electrical resources and transmission capability to firm up the Federal hydropower supplies needed to meet Western's contractual obligations will continue to be obtained. Transmission wheeling services are also purchased when a third party's transmission lines are needed to deliver Federal power to Western's customers.

Reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant and planned interest payments to the U.S. Treasury are also included in this section.

Performance Measures

The Equipment, Contracts and Related Expenses activity supports the performance measures presented under Program Mission.

- Well-maintained equipment, the availability of resources to rapidly restore service following any system disturbance, and the ability of staff to respond to minute-by-minute changes in load requirements are all directly tied to the Transmission System Performance measure. Timely replacement of old or failing electrical equipment prevents sudden failure, unplanned outages, and possible regional power system disturbances.
- This activity also supports the Safety measurement by placing safety first in all of Western's day-to-day operations, removing environmental hazards, and replacing equipment that may create a safety hazard for the public and Western's personnel. Each maintenance activity begins with a discussion of safe working procedures. This activity also indirectly supports public safety by minimizing or preventing electrical outages and the attendant safety risks and concerns.
- Western's commitment to optimize economic operation and maintenance of the interconnected high-voltage power system while not compromising the reliability of power deliveries directly supports the Cost Growth performance measure. A successful operation and maintenance program also reduces costs to Western's customers and the consumer by maintaining a high level of system reliability.
- The Repayment of Power Investment measure is supported by providing 24-hour/day highly reliable electrical power deliveries to our customers, thus enhancing revenues and repayment.

Funding Schedule

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Equipment, Contracts and Related Expenses	74,183	84,293	83,354	-939	-1.1%
Total, Equipment, Contracts and Related Expenses	74,183	84,293	83,354	-939	-1.1%

Detailed Program Justification

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Equipment, Contracts and Related Expenses			
■ Supplies and materials necessary to respond to routine and emergency situations in the high-voltage interconnected transmission system will be procured, and reimbursements to the Corps of Engineers for operation and maintenance of the Fort Peck Powerplant will continue. The request is based on projected work plans for activities funded from this account. Estimates are based on historical data of actual supplies needed to maintain the transmission system reliably, including emergency situations such as ice storms and tornadoes. Costs are based on recent procurement of similar items. The increase is attributed to anticipated costs associated with a recovery implementation program for endangered fish species in the Upper Colorado River Basin, scheduled for completion in 2005. The program provides facilities for the genetic conservation and propagation of the endangered fish species, for the restoration of floodplain habitat and fish passage, for regulation and/or supply of in- stream habitat flows, for preventing fish entrapment in canals, and for the removal or translocation of non-native fishes	8,629	8,439	10,634
■ Electrical resources, transmission capability and wheeling services will be purchased. Western has amended the Salt Lake City Area Integrated Projects Firm Electric Service Contracts which implement the decision in the Electric Power Marketing Environmental Impact Statement to return customers' power allocations to those established in the Post-1989 Marketing Plan. The action increases Western's firm annual contract commitments and is reflected beginning in FY 2000. Additionally, Western, at the direction of Congress, has developed procedures to obtain energy to offset lost generation	24,600	50,000	51,360

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
■ Capitalized equipment will be acquired to assure reliable service to Western's customers. Costs are based on analysis of system operation/maintenance requirements/concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques	10,508	7,165	6,112
■ Interest payments to the U.S. Treasury will occur. Estimates are based on Power Repayment Studies for the Projects funded in this account	30,446	18,689	15,248
Total, Equipment, Contracts and Related Expenses	74,183	84,293	83,354

Explanation of Funding Changes from FY 2000 to FY 2001

	FY 2001 vs FY 2000 ($000)
Equipment, Contracts and Related Expenses	
■ Increases for power purchases are due to anticipated tighter electrical markets	+1,360
■ An increase of $2,600,000 is attributed to costs associated with a recovery implementation program for endangered fish species in the Upper Colorado River Basin scheduled for completion in 2005. That increase is offset by reductions of approximately $405,000 in purchases of supplies and materials, and a reduction of $1,053,000 in purchases of capitalized equipment	+1,142
■ Planned interest payment to the U.S. Treasury in FY 2000 is less than FY 1999 because project principal payments are current. No deficit payment is included	-3,441
Total Funding Change, Equipment, Contracts and Related Expenses	-939

System Statistics

	FY 1999	FY 2000	FY 2001
Generating Plants (Number)	56	56	56
Generating Capacity:			
Installed Capability (kW)	10,605,000	10,605,000	10,605,000
Substations:			
Number [a]	256	258	260
Capacity (kVa)	26,446,748	26,446,748	26,446,748
Transmission Lines (Circuit-miles):			
500-kV	448.27	448.27	448.27
345-kV	1,628.34	1,628.34	1,628.34
230-kV	6,880.13	6,880.13	6,880.13
161-kV	840.66	840.66	840.66
138-kV	329.59	329.59	329.59
115-kV	5,770.75	5,770.75	5,770.75
69-kV and below	955.96	955.96	955.96
Total circuit-miles	16,853.70	16,853.70	16,853.70

[a]In FY 1999, includes removal of Loveland and Pine Bluffs (Colorado) and Ellendale (North Dakota), and addition of Topock (Arizona)substations. In FY 2000, includes addition of Griffith and Southpoint (Arizona) substations. In FY 2001, includes addition of Obanion and Sutter (California) substations.

Estimate of Revenues [a]

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Boulder Canyon Project [b]	48,309	56,845	59,818	59,217	58,434	57,622	57,340
Central Valley Project [c]	187,537	183,782	179,897	193,732	191,853	193,019	95,020
Central Arizona Project (Navajo) [d]	97,865	92,057	92,057	92,057	92,057	92,057	92,057
Falcon-Amistad Project [e]	3,267	3,428	4,312	4,310	4,307	4,305	4,303
Fryingpan-Arkansas Project	15,812	13,467	13,467	13,467	13,467	13,467	13,467
Pacific Northwest-Southwest Intertie Project	8,555	16,803	18,213	19,623	21,033	22,443	23,853
Parker-Davis Project	37,868	38,262	39,210	38,513	38,507	39,066	40,812
Pick-Sloan Missouri Basin Program	324,286	255,450	257,990	257,962	256,604	251,368	251,508
Provo River Project	208	247	247	234	233	232	232
Washoe Project	43	508	508	508	508	508	508
Colorado River Storage Project	153,539	117,027	117,801	118,259	118,386	118,536	118,536
Collbran Project	2,493	2,333	2,173	2,013	2,013	2,013	2,013
Rio Grande Project	2,109	2,039	1,970	1,901	1,831	1,831	1,831
Seedskadee Project	1,460	1,350	1,327	1,303	1,280	1,256	1,256
Dolores Project	2,902	2,893	2,893	2,893	2,893	4,455	4,455
Total	886,253	786,491	791,883	805,992	803,406	802,178	707,191

[a] FY 1999 amounts reflect actual revenues earned. For FY 2000 through FY 2005, project amounts in this table and the following sales table are based on FY 1998 Final Power Repayment Studies (PRS) except for Central Arizona Project (CAP) revenues which are based on estimated projections. No PRS is prepared for CAP because it has no power repayment obligation.

[b] FY 1999 amounts include Western revenues only; they do not include revenues for the Bureau of Reclamation.

[c] FY 2005 revenues for Central Valley Project assume marketing of CVP hydro-power resource only, with minimal purchases of power.

[d] Western has contractually agreed for the Salt River Project (SRP) to act as the scheduling entity and operating agent for the Central Arizona Project's (CAP) portion of the Navajo Generating Station's output (547 MW). In return, as Western retains marketing responsibility, SRP agreed to pay a monthly fixed and variable cost. This revenue meets CAP repayment requirements.

[e] Falcon and Amistad revenues for FY 2000 are based on the FY 1998 Final PRS. Revenues for 2001 through 2005 have been adjusted by $0.9 million annually to reflect increase in budget for operation and maintenance of the powerplants beginning in FY 2001.

Estimate of Energy Sales [a]

(in gigawatthours) [b]

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Boulder Canyon Project	5,182	5,352	5,283	5,135	4,501	4,501	4,501
Central Valley Project [c]	9,703	9,061	9,110	9,159	9,208	9,258	5,508
Central Arizona Project (Navajo)	4,072	3,565	3,565	3,565	3,565	3,565	3,565
Falcon-Amistad Project	88	165	165	165	165	165	165
Loveland Area Projects [d]	2,198	2,051	2,051	2,051	2,051	2,051	2,051
Pacific Northwest-Southwest Intertie Project [e]	0	0	0	0	0	0	0
Parker-Davis Project	1,766	1,346	1,346	1,346	1,346	1,346	1,346
Pick-Sloan Missouri Basin Program (Eastern Division)	13,326	10,463	10,534	10,532	10,435	9,961	10,071
Provo River Project	17	27	27	27	27	27	27
Washoe Project	15	10	10	10	10	10	10
Salt Lake City Area Integrated Projects [f]	8,691	6,113	6,140	6,170	6,165	6,180	6,180
Total	45,058	38,153	38,231	38,160	37,473	37,064	33,424

[a] FY 1999 amounts reflect actual sales. Unless otherwise noted in the previous table (Estimate of Revenues), all FY 2000 through FY 2005 amounts in this table are based on FY 1998 Final Power Repayment Studies (PRS).

[b] One gigawatthour (GWH) equals one million kilowatt-hours (kWh).

[c] FY 2005 sales for Central Valley Project assume marketing of CVP hydro-power resource only, with minimal purchases of power.

[d] Loveland Area Projects include Fryingpan-Arkansas Project and Pick-Sloan Missouri Basin Program (Western Division).

[e] Pacific Northwest-Southwest Intertie shows no energy sales, but reflects revenues from the transmission of energy (refer to the Estimate of Revenue table). The Intertie Project is for transmission of energy only.

[f] Salt Lake City Area Integrated Projects include the Colorado River Storage Project, Collbran Project, Rio Grande Project, Seedskadee Project, and Dolores Project.

Estimate of Proprietary Receipts

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Falcon Amistad Maintenance Fund, 895178	1,142	1,309	2,670	2,670	2,670	2,670	2,670
Sale and transmission of electric power, Falcon and Amistad Dams, 892245	2,449	1,983	1,642	1,640	1,637	1,635	1,633
Sale of Power and Other Utilities Not Otherwise Classified, 892249 [a]	0	177,004	42,500	42,500	42,500	42,500	42,500
Sale of Power - Western Area Power Administration - Reclamation Fund, 895000.27 [b]	386,964	195,472	293,262	308,040	305,136	304,434	245,981
Total, Proprietary Receipts	390,555	375,768	340,074	354,850	351,943	351,239	292,784

[a]The 892249 account provides for revenue transfers from the Reclamation Fund (895000.27) to the General Fund covering Corps of Engineers' expenditures for several dams on the Missouri River. The increase in FY 2000 includes the transfer amount anticipated in FY 1999 and a one-time adjustment for depreciation expenses due to a change in the service lives of the Corps' assets.

[b]Western's Reclamation Fund receipts in FY 2001 through 2005 assume a reduction of $53.4 million based on the budget request proposal to finance the PPW appropriation through a combination of existing off-budget authorities, as well as new authority providing "use of revenue." By FY 2005, the new authority is anticipated to be phased out. Also in FY 2005, the Reclamation Fund receipts reflect a reduction in the Central Valley Project resource marketed.

Pending Litigation

Western has no pending litigation that would impact its FY 2001 Congressional Budget Request.